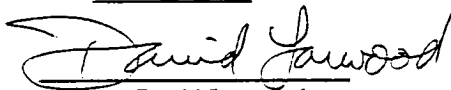


ABSTRACT

Microelectronic contact structures (260, 360, 460) are lithographically defined and fabricated by applying a masking layer (220, 320, 420) on a surface of a substrate (202, 302, 402) such as an electronic component, creating an opening (222, 322, 422) in the masking layer, depositing a conductive trace of a seed layer (250, 350, 450) onto the masking layer and into the openings, and building up a mass of conductive material on the conductive trace. The sidewalls of the opening can be sloped (tapered). The conductive trace can be patterned by depositing material through a stencil or shadow mask (240, 340, 440). A protruding feature (230, 430) may be disposed on the masking layer so that a tip end (264, 364, 464) of the contact structure acquires a topography. All of these elements can be constructed as a group to form a plurality of precisely positioned resilient contact structures.

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David Larwood

February 26, 1998  
Signed